

1 atgcactcaa gcagagaaga aatccacaag tactcaccag cctcctgggc tgcagagaag
 61 acagaatcaa tatg agc aca gca gga aaa gta atc aaa tgc aaa gca gct gtg cta tgg g
 M S T A G K V I K C K A A V L W E 17
 121 ag tta aag aaa ccc ttt tcc att gag gag gta gag gtt gca cct cct aag gct cat gaa g
 L K K P F S I E E V E V A P P K A H E V 37
 181 tt cgc att aag atg gtg gct gca gga atc tgt cgt tca gat gag cat gtg gtt agt ggc a
 R I K M V A A G I C R S D E H V V S G N 57
 241 ac ctg gtg acc ccc ctt cct gtg att tta ggc cat gag gca gcc ggc atc gtg gaa agt g
 L V T P L P V I L G H E A A G I V E S V 77
 301 tt gga gaa ggg gtg act aca gtc aaa cca ggt gat aaa gtc atc ccg ctc ttt act cct c
 G E G V T T V K P G D K V I P L F T P Q 97
 361 ag tgt gga aaa tgc aga att tgt aaa aac cca gaa agc aac tac tgc ttg aaa aat gat c
 C G K C R I C K N P E S N Y C L K N D L 117
 421 ta ggc aat cct cgg ggg acc ctg cag gat ggc acc agg agg ttc acc tgc agc ggg aag c
 G N P R G T L Q D G T R R F T C S G K P 137
 481 cc atc cac cac ttc gtc ggc gtc agc acc ttc tcc cag tac aca gtg gtg gat gag aat g
 I H H F V G V S T F S Q Y T V V D E N A 157
 541 ca gtg gcc aaa att gat gca gcc tcg ccc ctg gag aaa gtc tgc ctc att ggc tgt gga t
 V A K I D A A S P L E K V C L I G C G F 177
 601 tt tcg act ggt tat ggg tct gca gtc aaa gtt gcc aag gtc acc cca ggg tct acc tgt g
 S T G Y G S A V K V A K V T P G S T C A 197
 661 ct gtg ttt ggc ctg gga ggg gtc ggc cta tct gtt gtt atg ggc tgt aaa gca gct gga g
 V F G L G G V G L S V V M G C K A A G A 217
 721 ca gcc aga atc att gct gtg gac atc aac aag gac aaa ttt gca aag gct aaa gag ttg g
 A R I I A V D I N K D K F A K A K E L G 237
 781 gg gcc act gaa tgc atc aac cct caa gac tac aag aaa ccc att cag gaa gtg cta aag g
 A T E C I N P Q D Y K K P I Q E V L K E 257
 841 aa atg act gat gga ggt gtg gat ttt tcg ttt gaa gtc atc ggt cgg ctt gac acc atg a
 M T D G G V D F S F E V I G R L D T M M 277
 901 tg gct tcc ctg tta tgt tgt cat gag gca tgt ggc aca agt gtc att gta ggg gta cct c
 A S L L C C H E A C G T S V I V G V P P 297
 961 ct gat tcc cag aac ctc tca ata aac cct atg ctg cta ctg act gga cgc acg tgg aaa g
 D S Q N L S I N P M L L L T G R T W K G 317
 1021 ga gct att ttt gga ggc ttt aag agt aaa gaa tct gtc ccg aaa ctt gtg gct gac ttt a
 A I F G G F K S K E S V P K L V A D F M 337
 1081 tg gct aag aag ttt tca ctg gat gca tta ata aca aat att tta cct ttt gaa aaa ata a
 A K K F S L D A L I T N I L P F E K I N 357
 1141 at gaa gga ttt gac ctg ctt cgc tct gga aag agt atc cgt acc gtc ctg acg ttt tgaa
 E G F D L L R S G K S I R T V L T F STOP 375
 1201 acaatacaga tgccttcct tgtagcagtt ttcagcctcc tctaccctac atgatctgga
 1261 gcaacagcta ggaaatatca ttaattctgc tcttcagaga tgttaaaaat aaattacacg
 1321 tgggagcttt ccaaagaaat ggaaattgat gggaaattat ttgtcaagca aatgtttaaa

1381 atccaaatga gaactaaata aagtgttgaa catcaactgg ggaattgaag ccaataaacc
1441 ttccttctta accattcaaa aaaaaaaaaa

Figure 1

Number forward sequences

F1 TGAGAAAGGGTGAC
F2 CGTGGAAAGTGTTG
F3 TTTGAGAAGGGGTG
F4 TTGAGAAGGGGTGA
F5 GTGGAAAGTGTGAG
F6 GTTTGAGAAGGGGT
F7 TCGTGGAAAGTGTTT
F8 AAAGTGTTTGAGAAGG
F9 GAAAGTGTTTGAGAAGG
F10 GGAAAGTGTTTGAGAA
F11 TGTTTGAGAAGGGG
F12 GTGTTTGAGAAGGGG
F13 AAGTGTTTGAGAAGGG
F14 AGTGTTTGAGAAGGG
F15 TGGAAAGTGTTTGAGA
F16 TTTGAGAAGGGGTGACTAC
F17 TGAGAAGGGGTGACTACA
F18 TTGAGAAGGGGTGACTACA
F19 ATCGTGGAAAGTGTTGA
F20 GTTTGAGAAGGGGTGACT
F21 CATCGTGGAAAGTGTTG
F22 GTGTTTGAGAAGGGGTG
F23 AGTGTTTGAGAAGGGGTG
F24 TGTTTGAGAAGGGGTGA
F25 TCGTGGAAAGTGTTGAG
F26 AAGTGTTTGAGAAGGGGT
F27 GTGGAAAGTGTTTGAGAAGG
F28 TGGAAAGTGTTTGAGAAGG
F29 GAAAGTGTTTGAGAAGGGG
F30 AAAGTGTTTGAGAAGGGG
F31 GCATCGTGGAAAGTGTT
F32 GGAAAGTGTTTGAGAAGGG
F33 CGTGGAAAGTGTTTGAGA
F34 AGTGTTTGAGAAGGGGTGACTACA
F35 TGTTTGAGAAGGGGTGACTACAGT
F36 GAAAGTGTTTGAGAAGGGGTGAC
F37 GGCATCGTGGAAAGTGTTG
F38 GGAAAGTGTTTGAGAAGGGGTG
F39 TCGTGGAAAGTGTTTGAGAAGG
F40 ATCGTGGAAAGTGTTTGAGAAGG
F41 TGGAAAGTGTTTGAGAAGGGG
F42 GTGGAAAGTGTTTGAGAAGGGG
F43 GTGTTTGAGAAGGGGTGACTACAG
F44 AGTGTTTGAGAAGGGGTGACTACAGTC
F45 GTGTTTGAGAAGGGGTGACTACAGTC
F46 AAAGTGTTTGAGAAGGGGTGACTACA
F17 GAAAGTGTTTGAGAAGGGGTGACTACA
F30 TTGAGAAGGGGTGACTACAGTCAAA
F39 GGCATCGTGGAAAGTGTTGA
F47 TGGAAAGTGTTTGAGAAGGGGTG
F48 GTGGAAAGTGTTTGAGAAGGGGTG
F49 GGAAAGTGTTTGAGAAGGGGTGA
F50 CGGCATCGTGGAAAGTGTTT
F51 CATCGTGGAAAGTGTTTGAGAAGG
F52 GCATCGTGGAAAGTGTTTGAGAA
F53 ATCGTGGAAAGTGTTTGAGAAGGG
F54 CGTGGAAAGTGTTTGAGAAGGG
F55 AAGTGTTTGAGAAGGGGTGACTACAG

2/3 cont.

F56 GCCATGAGGCAGCCGGCATCG
F57 GAGGCAGCCGGCATCGTGGA
F58 ATGAGGCAGCCGGCATCGTGGA
F59 CCATGAGGCAGCCGGCATCGTG
F60 ATCGTGGAAGTGTGTTGAGAAGGGGTGACTACAGTC
F61 CGTGGAAGTGTGTTGAGAAGGGGTGACTACAGTC
F62 GGCCATGAGGCAGCCGGCA
F63 AGGCCATGAGGCAGCCGGCA
F64 TAGGCCATGAGGCAGCCGGCA
F65 TTAGGCCATGAGGCAGCCGGCA
F66 TTTAGGCCATGAGGCAGCCGGCA
F67 ATTTTAGGCCATGAGGCAGCCGGCA
F68 TTTTAGGCCATGAGGCAGCCGGCA
F69 CATGAGGCAGCCGGCATCGTGG
F70 GGAAAGTGTGTTGAGAAGGGGTGACTACAGTCAAACC
F71 TGGAAAGTGTGTTGAGAAGGGGTGACTACAGTCAAACC
F72 TGAGGCAGCCGGCATCGTGG
F73 CATCGTGGAAGTGTGTTGAGAAGGGGTGACTACA
F74 GAGAAGGGGTGACTACAGTCAAACCAGGTACAGGA
F75 GATTTTAGGCCATGAGGCAGCCGGC
F76 GGGTGACTACAGTCAAACCAGGTACAGGATTCA
F77 GTGATTTTAGGCCATGAGGCAGCCGG
F78 TGATTTTAGGCCATGAGGCAGCCGG
F79 CCTGTGATTTTAGGCCATGAGGCAGCCG
F80 CTGTGATTTTAGGCCATGAGGCAGCCG
F81 TGTGATTTTAGGCCATGAGGCAGCCG
F82 TCGTGGAAGTGTGTTGAGAAGGGGTGACTACAGT
F83 TGTTGAGAAGGGGTGACTACAGTCAAACCAGGT
F84 TTTGAGAAGGGGTGACTACAGTCAAACCAGGTACAGG
F85 TTGAGAAGGGGTGACTACAGTCAAACCAGGTACAGG
F86 TGAGAAGGGGTGACTACAGTCAAACCAGGTACAGG
F87 GTTTGAGAAGGGGTGACTACAGTCAAACCAGGTACAG
F88 GAAAGTGTGTTGAGAAGGGGTGACTACAGTCAAACCAG
F89 AGAAGGGGTGACTACAGTCAAACCAGGTACAGGATTTC
F90 GAAGGGGTGACTACAGTCAAACCAGGTACAGGATTTC
F91 GGGGTGACTACAGTCAAACCAGGTACAGGATTCA
F92 AGGGGTGACTACAGTCAAACCAGGTACAGGATTCA
F93 AAGGGGTGACTACAGTCAAACCAGGTACAGGATTCA
F94 CCCTTCCTGTGATTTTAGGCCATGAGGCA
F95 CAGCCGGCATCGTGGAAGTGTGTTG
F96 GCATCGTGGAAGTGTGTTGAGAAGGGGTG
F97 AAAGTGTGTTGAGAAGGGGTGACTACAGTCAAACCAGG
F98 AAGTGTGTTGAGAAGGGGTGACTACAGTCAAACCAGG
F99 AGTGTGTTGAGAAGGGGTGACTACAGTCAAACCAGG
F100 GTGTTTGAGAAGGGGTGACTACAGTCAAACCAGG
F101 CAGTCAAACCAGGTACAGGATTCACTCAGGG
F102 GACTACAGTCAAACCAGGTACAGGATTCACTCAGGG
F103 ACAGTCAAACCAGGTACAGGATTCACTCAGGG
F104 TACAGTCAAACCAGGTACAGGATTCACTCAGGG
F105 CTACAGTCAAACCAGGTACAGGATTCACTCAGGG
F106 ACTACAGTCAAACCAGGTACAGGATTCACTCAGGG
F107 GGCAGCCGGCATCGTGGAAGTG
F108 AGGCAGCCGGCATCGTGGAAGTG
F109 GTGACTACAGTCAAACCAGGTACAGGATTCACTCAGG
F110 TGACTACAGTCAAACCAGGTACAGGATTCACTCAGG
F111 GGTGACTACAGTCAAACCAGGTACAGGATTCACTCA
F112 TCCTGTGATTTTAGGCCATGAGGCAGCC
F113 TTCCTGTGATTTTAGGCCATGAGGCAGCC
F114 CTCCTGTGATTTTAGGCCATGAGGCAGCC
F115 CCGGCATCGTGGAAGTGTGTTGAGAAGG
F116 GGCATCGTGGAAGTGTGTTGAGAAGGGG

2/3 cont.

F117 CCTTCCTGTGATTTTAGGCCATGAGGCAGC
F118 GCAGCCGGCATCGTGGAAGTGT
F119 CGGCATCGTGGAAGTGTGAGAAGGG
F120 AGCCGGCATCGTGGAAGTGTGAGA
F121 GCCGGCATCGTGGAAGTGTGAGA

Number reverse sequences

R1 AACACTTTCCACGAT
R2 AAACACTTTCCACGA
R3 CAAACACTTTCCACG
R4 CCTCATGGCCTAA
R5 CCTCATGGCCTAAA
R6 CCCCTTCTCAAACAC
R7 CCCTTCTCAAACACT
R8 CCCCTTCTCAAACA
R9 TTCTCAAACACTTTCC
R10 TCACCCCTTCTCAA
R11 CCCTTCTCAAACACTT
R12 GTCACCCCTTCTCA
R13 CACCCCTTCTCAAA
R14 ACCCCTTCTCAAAC
R15 CTCAAACACTTTCCACGA
R16 TCAAACACTTTCCACGAT
R17 AACACTTTCCACGATGC
R18 TCTCAAACACTTTCCACG
R19 CAAACACTTTCCACGATG
R20 CCCCTTCTCAAACACTTTC
R21 CACCCCTTCTCAAACAC
R22 CACCCCTTCTCAAACACT
R23 CCTTCTCAAACACTTTCCAC
R24 CCTTCTCAAACACTTTCCA
R25 TCACCCCTTCTCAAACA
R26 CCCTTCTCAAACACTTTCC
R27 TGTAGTCACCCCTTCTCAA
R28 ACCCCTTCTCAAACACTT
R29 TGTAGTCACCCCTTCTCA
R30 GTAGTCACCCCTTCTCAAA
R31 CCCCTTCTCAAACACTTT
R32 AGTCACCCCTTCTCAAAC
R33 CAAACACTTTCCACGATGCC
R34 CCTTCTCAAACACTTTCCACGA
R35 CCTTCTCAAACACTTTCCACGAT
R36 GTCACCCCTTCTCAAACACTTTC
R37 CTGTAGTCACCCCTTCTCAAACAC
R38 TGAGTCACCCCTTCTCAAACACT
R39 CCCCTTCTCAAACACTTTCCAC
R40 CCCCTTCTCAAACACTTTCCA
R41 ACTGTAGTCACCCCTTCTCAAACA
R42 CACCCCTTCTCAAACACTTTCC
R43 AAACACTTTCCACGATGCCG
R44 4TCAAACACTTTCCACGATGCC
R45 CCCTTCTCAAACACTTTCCACGAT
R46 CCCTTCTCAAACACTTTCCACGA
R47 TTCTCAAACACTTTCCACGATGC
R48 CCCTTCTCAAACACTTTCCACG
R49 CCTTCTCAAACACTTTCCACGATG
R50 TGAGTCACCCCTTCTCAAACACTTTC
R51 GACTGTAGTCACCCCTTCTCAAACAC
R52 CACCCCTTCTCAAACACTTTCCAC
R53 CACCCCTTCTCAAACACTTTCCA
R54 TGACTGTAGTCACCCCTTCTCAAACA

2/3 cont.

R55 TCACCCCTTCTCAAACACTTTCC
R56 CTGTAGTCACCCCTTCTCAAACACTT
R57 GGTTTGACTGTAGTCACCCCTTCTCA
R58 TTGACTGTAGTCACCCCTTCTCAAA
R59 TGAGTCACCCCTTCTCAAACACTTT
R60 TTGACTGTAGTCACCCCTTCTCAAAC
R61 CCCTTCTCAAACACTTTCCACGATGCCG
R62 CCTTCTCAAACACTTTCCACGATGCCGG
R63 TCTCAAACACTTTCCACGATGCCGGC
R64 CCCCTTCTCAAACACTTTCCACGATGCC
R65 GACTGTAGTCACCCCTTCTCAAACACTTTCCACGAT
R66 ACTGTAGTCACCCCTTCTCAAACACTTTCCACGA
R67 CACCCCTTCTCAAACACTTTCCACGATGC
R68 GACTGTAGTCACCCCTTCTCAAACACTTTCCACG
R69 TCTCAAACACTTTCCACGATGCCGGCT
R70 TGAGTCACCCCTTCTCAAACACTTTCCACGATG
R71 CAAACACTTTCCACGATGCCGGCTG
R72 CTGGTTTGACTGTAGTCACCCCTTCTCAAACACTTTC
R73 CCTGGTTTGACTGTAGTCACCCCTTCTCAAACAC
R74 CCTGGTTTGACTGTAGTCACCCCTTCTCAAACACT
R75 GTTTGACTGTAGTCACCCCTTCTCAAACACTTTCCAC
R76 GGTTTGACTGTAGTCACCCCTTCTCAAACACTTTCCA
R77 ACCTGGTTTGACTGTAGTCACCCCTTCTCAAACA
R78 GGTTTGACTGTAGTCACCCCTTCTCAAACACTTTCC
R79 CCTGGTTTGACTGTAGTCACCCCTTCTCAAACACTT
R80 CCTGGTTTGACTGTAGTCACCCCTTCTCAAACACTTT

Figure 2

Number forward sequences

F1 GAAGACAGTGTTCAGCTAACACTAACG
 F2 ACCTTGTGCAAGTCCTTTTCGTC
 F3 CCTTGTGCAAGTCCTTTTCGTC
 F4 GGTGAAGGGTAGAATACACGCA
 F5 ACAGTGTTCAGCTAACACTAACGTGG
 F6 GACAGTGTTCAGCTAACACTAACGTG
 F7 AGACAGTGTTCAGCTAACACTAACGTG
 F8 CAGTGTTCAGCTAACACTAACGTGG
 F9 TAATGGTTGAAGGGTAGAATACACGC
 F10 ATAATGGTTGAAGGGTAGAATACACGC
 F11 TGGTTGAAGGGTAGAATACACGC
 F12 ATGGTTGAAGGGTAGAATACACGC
 F13 AATGGTTGAAGGGTAGAATACACGC
 F14 CCTTTCGTCTTTCATTGCCTCG
 F15 CTTTCGTCTTTCATTGCCTCG
 F16 TTTCGTCTTTCATTGCCTCG
 F17 CATAATGGTTGAAGGGTAGAATACACG
 F18 TGAAGGGTAGAATACACGCATGC
 F19 TGTGCAAGTCCTTTTCGTCTTT
 F20 GTCTTTCATTGCCTCGGTTTCC
 F21 TCTTTCATTGCCTCGGTTTCC
 F22 CTTTCATTGCCTCGGTTTCC
 F23 GACCTTGTGCAAGTCCTTTTCG
 F24 TGACCTTGTGCAAGTCCTTTTCG
 F25 GTGACCTTGTGCAAGTCCTTTTCG
 F26 TTCAGCTAACACTAACGTGGAAGTTAC
 F27 CTTGTGCAAGTCCTTTTCGTCTTT
 F28 TTGTGCAAGTCCTTTTCGTCTTT
 F29 TTCCTCATCCAGGCTGACTAATC
 F30 TTGAAGGGTAGAATACACGCATG
 F31 GTTGAAGGGTAGAATACACGCATG
 F32 AGTGTTCAGCTAACACTAACGTGGA
 F33 AACCTAGTGCCTGGCATCTAGTAGTAC
 F34 CTAACCTAGTGCCTGGCATCTAGTAGT
 F35 GTGTTCAGCTAACACTAACGTGGA
 F36 CCTAGTGCCTGGCATCTAGTAGTACA
 F37 ACCTAGTGCCTGGCATCTAGTAGTACA
 F38 TCTCCAGGCTCTAACCTAGTGCC
 F39 ATCTCCAGGCTCTAACCTAGTGCC
 F40 CTCCAGGCTCTAACCTAGTGCC
 F41 TATCTCCAGGCTCTAACCTAGTGCC
 F42 ATATCTCCAGGCTCTAACCTAGTGCC
 F43 TATATCTCCAGGCTCTAACCTAGTGCC
 F44 TGTTCAAGCTAACACTAACGTGGAAG
 F45 CATGCCTGCCTGAAGTCATACA
 F46 CGTCTTTCATTGCCTCGGT
 F47 GCCTGCCTGAAGTCATACATGC
 F48 TCTAACCTAGTGCCTGGCATCTAGT
 F49 CATGTTCCCTGAGTGTGAATCC
 F50 CCTCATCCAGGCTGACTAATCTTG

Number reverse complementary sequences

R1 GGCTGCAGGAATCTGTCGTT
 R2 GCTGCAGGAATCTGTCGTTCA
 R3 TGGCTGCAGGAATCTGTCG
 R4 GGCTGCAGGAATCTGTCGT

3/3 cont.

R5 GGCTGCAGGAATCTGTCGTTTC
R6 GCTGCAGGAATCTGTCGTTTCAG
R7 CGTTCAGATGAGCATGTGGTTAGTG
R8 CCTTCCTGTGATTTTAGGCCAT
R9 TCAGATGAGCATGTGGTTAGTGG
R10 GGGAAAAAGAGGAAGGTTTACTG
R11 CAACCTGGTGACCCCCCTT
R12 CGTTCAGATGAGCATGTGGTTAG
R13 CGTTCAGATGAGCATGTGGTTAGT
R14 CCTTCCTGTGATTTTAGGCCA
R15 AGATGAGCATGTGGTTAGTGGC
R16 TTAGAAAAATTGGGTTTGTAAAGTCCA
R17 TGAGCATGTGGTTAGTGGCAAC
R18 CCCTTCCTGTGATTTTAGGCC
R19 GGGTTTGTAAAGTCCATCTGACAGTC
R20 AAGAGTTCACAATCAATTTGCATTAGA
R21 CAAGAGTTCACAATCAATTTGCATTA
R22 AATCTGTCGTTAGATGAGCATGT
R23 AGGGAAAAAGAGGAAGGTTTACTG
R24 GAAAAAGAGGAAGGTTTACTGGAT
R25 GGAAGGTTTACTGGATAACCTTG
R26 GCATGTGGTTAGTGGCAACCT
R27 AGAAAAATTGGGTTTGTAAAGTCCATC
R28 GGGTTTGTAAAGTCCATCTGACAGT
R29 CAAGGGAAAAAGAGGAAGGTTTACTG
R30 CCCCTTCCTGTGATTTTAGGC
R31 CAAGAGTTCACAATCAATTTGCATTAG
R32 TCAAGGGAAAAAGAGGAAGGTTT
R33 AAGGTTTACTGGATAACCTTGGA
R34 GGGATTATCAGCAAAACCCTTGA
R35 TGGATAACCTTGGAGATAAACTGAATC
R36 GGAAAAAGAGGAAGGTTTACTGG
R37 TTGGGAATAGTAGGGATTATCAGCA
R38 TGTGATTTTAGGCCATGAGGC
R39 GGGATTATCAGCAAAACCCTTG
R40 TGAGCATGTGGTTAGTGGCA
R41 GGTGGCTGCAGGAATCTGTC
R42 TCGTTCAGATGAGCATGTGGTTA
R43 GGAATCTGTCGTTAGATGAGC
R44 TTTTCTTGGTGTAAATTTGCAATTC
R45 GGTGGCTGCAGGAATCTGT
R46 AAGGGAAAAAGAGGAAGGTTTACTG
R47 GACTGGATAACCTTGGAGATAAACTGA
R48 GAAGGTTTACTGGATAACCTTGG
R49 TGTGGTTAGTGGCAACCTGGT
R50 TGGGTTTGTAAAGTCCATCTGACAG

Figure 3